

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP PROGRAM
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

PROJECT INFORMATION

Project Title: Antelope Drive Catchment

Project No. 09-514

Region/GMU: Region 5 / Unit 36B

HPC: Tucson

Project Type: New Water Development

Project Description:

This project is one of several catchments that have been planned for years to restore water to the Buenos Aires NWR. The refuge stopped grazing in the mid-1980s. This improved range conditions considerably, however, the improved grass cover reduced run-off and many of the previously reliable water tanks went dry and most stayed dry. The lack of surface water has been identified by the department for years as a limiting factor for wildlife on the refuge, but the previous refuge administration would not allow water to be restored until the Comprehensive Conservation Plan was complete. That plan is now complete and we can commence the restoration efforts begun 9 years ago.

This project proposes we add a water catchment on the southern part of the refuge. This is the last area on the refuge where pronghorn antelope still occur. The location is such that pronghorn antelope, mule deer, masked bobwhite quail, and javelina will benefit from this water source. The nearest reliable water source to this location is approximately 3 miles away in an area that is poor to fair Pronghorn habitat. That water is in an area that does not get a lot of use by remaining antelope. This project is an example of well-planned water source in an area that is being managed properly in all other respects (i.e., great habitat quality).

Wildlife Species to Benefit: Antelope 75 %, Mule Deer 25%, and other mammals and birds including Masked Bobwhite Quail.

This proposed water will provide year round water in the habitat that antelope are using. Currently, there are only one perennial water source for pronghorn in this area and it is located at triangle pond off of the main road into the refuge headquarters. There are other dirt ponds available but they dry up and each dirt tank is surrounded by mesquite trees in areas that would be considered poor antelope habitat.

Possible Funding Partners:

**Implementation Schedule: Dependent on Funding and Crew Schedule to complete project.
Approximately 10 days to build this catchment.**

Beginning:01/2010

Completed:08/2010

PROJECT FUNDING

SBG Funds Requested: \$31,000

Cost Share Funds: \$1,000 Archaeology (to be completed by USFWS)

Total Project Costs: \$32,000

PARTICIPANT INFORMATION	
Applicant: Mark Frieberg (AZGFD) mfrieberg@azgfd.gov Telephone: 520-762-8172	Address: AZ Game and Fish Department 555 N. Greasewood Road Tucson, AZ 85745
AGFD Contact and Phone No. (If applicant is not AGFD personnel)	
Coordinated with: Gabe Paz, Jim Heffelfinger AZGFD, Sally Gall and Mike Hawkes (BANWR)	Date: 05/26/09
Applicant's signature:	Date: 07/21/09

SEND COMPLETED APPLICATIONS TO:

5000 W. Carefree Highway
Phoenix, Az. 85023
(623) 236-7354
Fax (602) 789-3929
E-mail: rthompson@azgfd.gov

NEED STATEMENT/PROBLEM ANALYSIS:

This catchment will be critical for antelope, mule deer, javelina, and whitetail in this area. The area is currently devoid of perennial water and has not been grazed for almost 20 years. The range conditions are good and the refuge operates an aggressive burning program which improves forage conditions. Most fences have been removed from the refuge property. With all other manageable factors taken care of we need to make sure the Antelope habitat has an adequate distribution of water.

PROJECT OBJECTIVES:

To improve water availability for antelope and to add a reliable source of water on the south end of the Buenos Aires Refuge. Currently the only perennial water source is next to the main Refuge headquarters. There are several dirt tanks in the area but none of them are perennial. This will complement the last catchment that was built on the 36B side off of the High Gates Road which is approximately 7 miles to the north of the proposed catchment. This should improve the current distribution of pronghorn antelope and allow them to use more habitat during dry years and dry times of the year. It is one more step in our quest to restore water distribution on the refuge to levels it was when the Buenos Aires Ranch was operating.

PROJECT STRATEGIES:

Construct a new catchment in the location noted below using components itemized in the budget table.

PROJECT LOCATION:

We have two proposed sites for this catchment. Each site is within the area that antelope still exist on this refuge. These locations are also within the Pronghorn Management Zone in the Buenos Aires National

Wildlife Refuge Habitat Management Plan.

The first location is Antelope Drive #1 and it is located south of the Refuge Headquarters off of Antelope Drive. This proposed location is just inside an area that is designated as a “No Hunting Zone”. Currently there is not a season for Antelope in this Unit so it will not affect any hunting opportunities for antelope. We chose this area in the “No Hunt Zone” so that Antelope can drink at this location year round without being disturbed by hunters hunting other species of wildlife. On the Refuge during most seasons, hunters will set up blinds at water sources and sit at those locations almost every day. By placing this catchment just inside the “No Hunt Zone” it would allow the antelope the opportunity to access the catchment without being stressed by hunters.

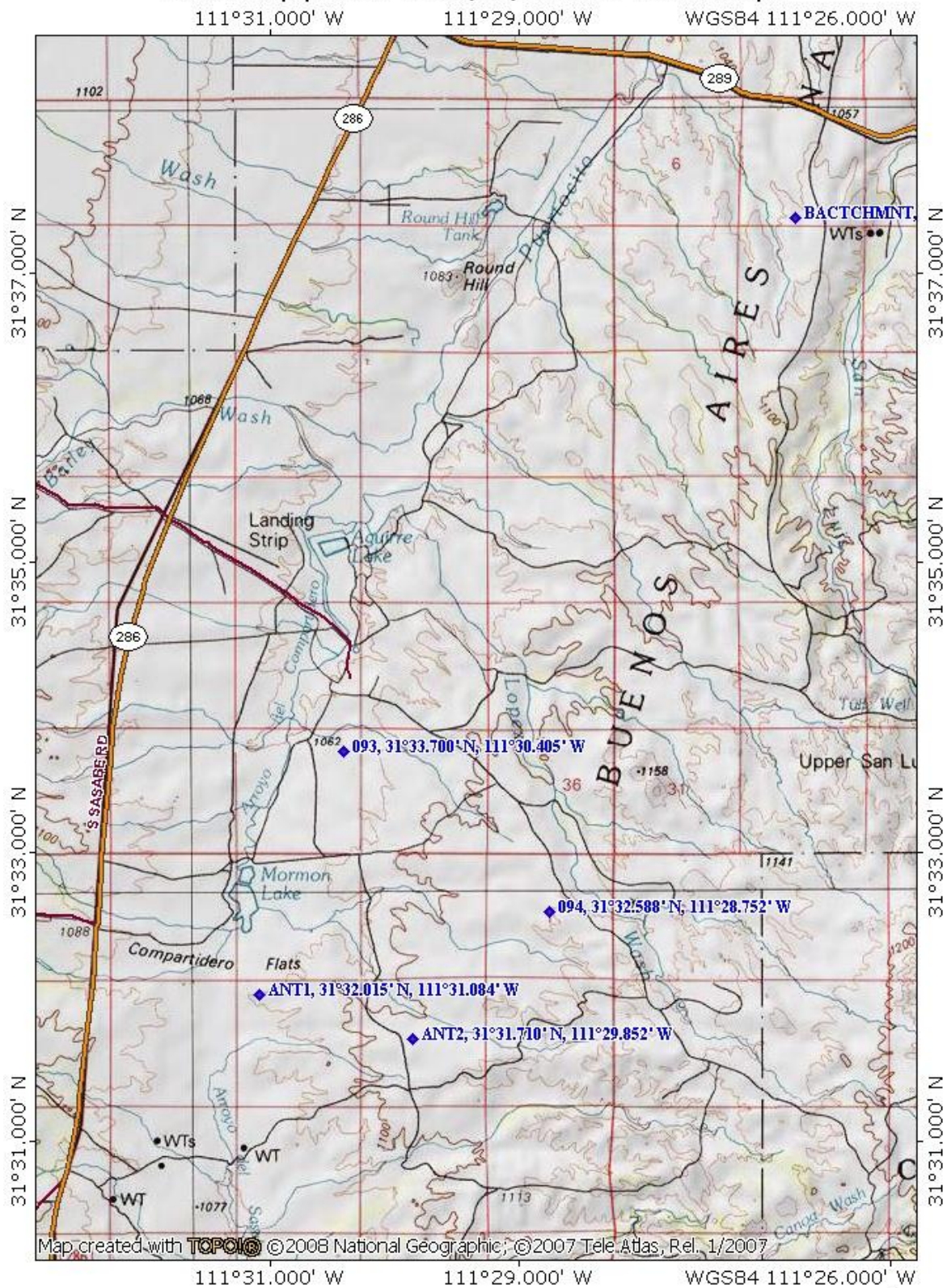
Antelope Drive #1, GPS Coordinates, 31° 31.710’ and 111°29.852’, Township 22 South, Range 8 East, Section 11, NW ¼, SE ¼.

The second proposed Location is Antelope Drive #2. This location is in an area that is in a hunting zone and there is a possibility that hunters may set up blinds on this catchment to hunt mule deer, javelina, coyotes, and other legal game.

Antelope Drive #2, GPS Coordinates, 31° 32.015’ and 111°31.084’, Township 22 South, Range 8 East, Section 10, NW ¼, NW ¼.

These proposed locations are at the bottom of the map on the next page.

TOPO! map printed on 09/01/09 from "Untitled.tpo"



0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles
0 1 2 3 4 5 km

TN MN
10 1/2
09/01/09

LAND OWNERSHIP AT PROJECT SITE (Please state specifically if PRIVATE PROPERTY and provide landowner's name):

The project is located on USFWS land, Buenos Aires National Wildlife Refuge.

IF PRIVATE PROPERTY, IS THERE A STEWARDSHIP AGREEMENT BETWEEN THE LANDOWNER AND THE DEPARTMENT?

N/A

HABITAT DESCRIPTION:

The proposed locations for this catchment are at elevations of 3640' for Antelope Drive #1 and 3560 for Antelope Drive #2 in a Sonoran Desert grassland habitat consisting of various grass species, mesquite, and shrubs.

ITEMIZED USE OF FUNDS:

Materials	Grant Dollars Requested	Cost Share
24' x 48' Apron including gutter	\$6000	
3' walk-in trough	2,000	
Two 4,500 gallon tanks (\$4,000 each)	8,000	
Archaeology (USFWS)		\$1,000
Labor, per diem, equipment costs	15,000	
Total:	\$31,000	

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

This proposed catchment location was chosen in cooperation between the Buenos Aires National Wildlife Refuge and the Arizona Game and Fish Department. These agencies have teamed up to transplant pronghorn (160+ antelope in two transplants) into this valley and they are currently working together to improve pronghorn numbers by improving habitat and water distribution. These proposed catchment locations were selected by Mary Hunnicutt (USFWS), and Gabriel Paz (AZGFD). The location was specifically chosen to provide perennial water source for wildlife (specifically Pronghorn Antelope) in an area that has an abundance of wildlife.

PROJECT MONITORING PLAN:

All catchments in Region 5 are monitored at least twice annually by wildlife managers to determine if water hauling is necessary.

Refuge personnel will also monitor this catchment. The Refuge can also assist the department by providing water or hauling water to this catchment.

PROJECT MAINTENANCE:

This catchment will be the Department's responsibility to maintain. It will be checked a minimum of twice per year.

PROJECT COMPLETION REPORT TO BE FILED BY:

The Department's Development Branch would complete the project completion report.

WATER DEVELOPMENT PROJECTS (see attached worksheet):

TREE SHEARING (AGRA-AXE, PUSH) PROJECTS (see attached worksheet):

WATER DEVELOPMENT WORKSHEET

PROJECT NAME: ANTELOPE DRIVE CATCHMENT

- 1) **Is the water development listed as a priority in the most recent “Wildlife Water Development Annual Implementation Schedule?”** Yes
- 2) **Please list the Development Branch personnel and date coordinated with for this project.**
A Site visit was not completed with development branch due to time constraints. Applicant will coordinate with Development Branch this September. Site visit will be completed (if needed) later this fall when other Development Branch site visits for Region V projects are planned, prior to HPC funding meeting.
- 3) **What is the estimated annual inches of precipitation for the area? (mark one)**
☐ 2-4 ☐ 4-6 ☐ 6-8 ☐ 8-10 ☐ 10-12 ☒ 12-14 ☐ 14-16 ☐ >16
- 4) **Is there a perennial water source available to big game within four miles of this project?**
☐ YES (please complete #5 below) ☒ NO (skip #5 below)
- 5) **For the accessible, perennial water source nearest this project:**
Name of water source:
Type of water source (catchment, spring, dirt tank, etc.):
Ownership of water source:
Distance in miles from project:
- 6) **Is the target wildlife species a result of transplant efforts?** ☒ YES ☐ NO
There are pronghorn antelope in this area from two separate releases on the refuge. One release was in the 1980's and the second release was in the late 1990's. Currently the remaining antelope on the refuge are found in this immediate area. We observed 16 antelope in this area on January 28, 2007.
- 7) **Please list any special land management status for the project site (i.e. Wilderness, National Park, National Monument, etc). If private land, list landowner.**

Buenos Aires National Wildlife Refuge (United States Fish and Wildlife Service)
- 8) **Please provide the following information about access to the proposed site:**
Type of access (mark one): ☒ 2x4 vehicles ☐ 4x4 only ☐ foot only**
**If foot access only: Distance in miles: Approx. hiking time:

-- Does access to this site require crossing private or tribal lands? ☐ YES ☒ NO

-- Please describe any restrictions to public access:
- 9) **Please list below (or on a separate sheet) the material type and dimensions of each component proposed to be added, modified, or repaired.**
- 10) **Was a site visit completed?** ☒ Yes ☐ No If Yes, please list personnel that attended and date.

Gabriel Paz (AZGFD) and Mary Hunnicutt (USFWS)